

REMARKS

Claims 2-4 are all the claims pending in the application.

Claims 2-4 are rejected.

Claims 2-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of US Patent No. 7,166,977.

Claims 2-4 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shimogama et al. (US 5,650,079).

The Applicants traverse the rejections and request reconsideration..

Examiner Interview

The Applicants thank the Examiner for the interview held on March 4, 2010. Specifically, the Applicants explained the two-step process of first turning the current off and then turning the contact off according to the invention. Notably, the prior art has the disadvantage that a spark is generated when the contact is broken all of a sudden leading to the contact points being roughened. The Applicants further explained the distinction between the present invention and Yaskawa's '977 patent as well as the cited prior art '079.

Double Patenting

Claims 2-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of US Patent No. 7,166,977. However, the claims of the '977 patent are completely different from the present invention.

In '977, a brake is manually released. The brake is released by turning on both of two contacts in order to avoid from human operation error. If at least one of the contacts turns off, a brake releasing current is cut off so that the brake is applied. Namely, by turning off the contact, the brake releasing current is cut off.

On the contrary, the present invention is different from '977. A rectifying current of the current control rectifying element is caused to be in a decreasing condition and a non-feeding condition by the driving power supply turn-OFF instruction. A contact of the relay apparatus is opened at a predetermined time after the instruction.

While a spark is produced at the contact in '977, a spark is not produced in the present invention. The Applicants respectfully submit that the double patenting rejection

Claim Rejections - 35 U.S.C. § 102

Rejection of Claims 2-4 as being anticipated by Shimogama et al.

The Applicants respectfully submit that Shimogama does not disclose (or suggest) the present invention as recited in claim 2-4.

Shimogama relates to an arc welding apparatus, and a welding current is turned on/off at the contact Crb2 (col. 5, lines 23 to 25, Fig. 2). When the welding current is turned on/off, a spark is produced at the CRb2, and the contact is roughened. In other words Shimogama does not disclose anything more than the admitted prior art of the present Application. Therefore, the problems in the prior art are also present in Shimogama. The main rectifying unit R1 includes an inverter unit, and is connected to a transformer.

However, the present invention is completely different from Shimogama. Shimogama does not disclose that a contact is opened only after a rectifying current is decreased and cut off in order to avoid sparks being produced, leading to roughening of the contacts. In other words, the two step process of first decreasing and cutting off of the current and then opening the circuit is not disclosed or suggested by Shimogama.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 *citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Claims 2-4 are not anticipated by Shimogama in view of the differences noted above.

Claim 2 is amended to further clarify the difference. These amendments are at least supported by the description from page 21, line 25 to page 22, line 25 in the present specification.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/533,569

Attorney Docket No.: Q87581

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Chidambaram.S.Iyer/

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/265550

65565

CUSTOMER NUMBER

Date: April 8, 2010

Chid S. Iyer
Registration No. 43,355